U.S. Department of the Interior • U.S. Geological Survey

MINERAL INDUSTRY SURVEYS

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TIN IN OCTOBER 1996

Domestic consumption of primary tin in October was estimated by the U.S. Geological Survey (USGS) to be slightly higher than in September 1996 and about 3% higher than in October 1995.

The *Platt's Metals Week* composite price for tin was \$4.00 per pound, slightly lower than in September and slightly lower than in October 1995.

The Defense Logistics Agency's Fiscal Year 1997 Consolidated Annual Materials Plan (AMP) went into effect October 1. It set a ceiling of 12,000 metric tons for sales of tin from the Defense National Stockpile, but DLA officials noted that they plan to later revise AMP figures for some materials to include new sales authority recently granted by Congress.¹

The DLA set November 6 as the date for its first monthly offering of 200 metric tons of tin in fiscal year 1997. Tin sales will be held on the first Wednesday of every month.²

It was reported that two domestic scrap processors, Schnitzer Steel Industries Inc. (Portland, OR) and Hugo Neu Corp. (New York, NY) are engaged in efforts to purchase control of Proler International Corp. Proler is based in Houston, TX, and is an important domestic detinner, with detinning facilities in Coolidge, AZ, and Seattle, WA.³

In Helsinki, Finland, it was reported that at the International Iron and Steel Institute Conference, there was a lively forum on the contrasting relative market strengths of the steel can for beverage applications in Europe and in the United States. An official of Rasselstein Hoesch GmbH, a large German tinplate producer, stated that about half of all soft-drink and beer cans in Europe are made from tinplate; and in Germany and several other countries the usage rate is more than 75% tinplate. He further noted that technology developed by a joint effort of British Steel PLC, Hoogovens Group BV, Sollac SA, and Rasselstein in Europe had succeeded in reducing the weight of steel beverage cans by about 20% in the past 10 years, and some further weight and cost reductions could be forthcoming. He

observed, however, that tinplate controlled only 16% of the 190-billion-unit worldwide beverage can market. He noted the relative concentration of the market by declaring that Coca-Cola, Pepsi-Cola, and three American breweries use 60% of the world's beverage cans. An official from Nippon Steel Corp. (Japan) related that steel holds a 60% share of the beverage can market in Japan. In contrast, in the United States, aluminum now controls virtually 100% of the beverage can field.⁴

In Brussels, Belgium, the Association of European Producers of Packaging Steel (APEAL) announced that Europe's steel packaging recycling rate grew more than one-fifth in 1995, reaching an average rate of 41%. The association observed that steel packaging remained well above the 15% recycling target that all materials are required to achieve by 2001 under the European Union's (EU) packaging and packaging waste directive. The EU steel industry has set a goal of recycling 60% of all steel packaging by 2005, and the current feeling was that rate could reach 65% by then. APEAL said the 41% recycling rate represents about 1 million metric tons of steel collected and recycled. Germany, with a recycling rate of 67% under laws requiring that packagers explore new ways to recycle almost all of their materials, was Europe's leader in 1995. It was followed by the Netherlands (58%), France (40%), Belgium (31%), Spain (17%), and the United Kingdom (16%). Up to 25% of all steel cans in Europe are now made from recycled materials.⁵

In Brazil, it was reported that an Amazon Indian tribe has blocked the road leading into Pitinga, Brazil's largest tin mine and is refusing to reopen it until Cia. Brasileira de Metais Non-Ferrosos (CBMNF) increases the payment the tribe receives for allowing the use of roads traversing its land. Until, now, the Paranapanema unit of CBMNF had been paying the 700-member Waimiri-Atroari tribe a \$16,000-per-month toll-like charge in exchange for letting Paranapanema's trucks use a road that cuts through 27 miles of the tribe's land in western Amazonas state. Pitinga accounts for more than 90% of

Paranapanema's tin-in-concentrate output, about 15,000 metric tons annually, 75% of which is eventually exported after smelting. The Waimiri-Atroari Indians wish to raise the toll charge to \$76,000 per month. Paranapanema reportedly has countered with an offer of \$20,000 per month.

In India, Hamco Mining and Smelting Co. announced that it has applied to the London Metal Exchange to have its "HAMCO" brand of refined tin listed.⁷

Update

On December 27, 1996, the *Platt's Metals Week* composite price for tin was \$3.91 per pound.

¹Platt's Metals Week. US DLA Annual Sales Plan To Contain New Sales Authority. V. 67, No. 40, Oct. 7, 1996, p. 1.

²American Metal Market. First Monthly Tin Sale Scheduled. V. 104, No. 194, Oct. 7, 1996, p. 16.

³——. Schnitzer Extends Purchase Offer. V. 104, No. 205, Oct. 22, 1996, p. 10.

4______. U.S. European Can Markets Contrast. V. 104, No. 202, Oct. 17, 1996, p. 2.

5 ______. Europe Steel Can Recycling Up. V. 104, No. 207, Oct. 24, 1996, p. 7.

6——. Amazon Tribe Closes Tin Mine Access Road. V. 104, No. 197, Oct. 10, 1996, p. 12.

⁷Metal Bulletin. In Brief. No. 8122, Oct. 21, 1996, p. 7.

TABLE 1 SALIENT TIN STATISTICS 1/

(Metric tons, unless otherwise noted)

		1:	996	
				January-
	1995 p/	September	October	October
Production, secondary e/ 2/	10,800	900	900	9,000
Consumption:				
Primary	34,400	2,840	2,870	30,200
Secondary	10,400	847	850	8,600
Imports for consumption, metal	33,200	2,360	NA	NA
Exports, metal	2,790	340	NA	NA
Stocks at end of period	4,580	4,580 r/	4,660	XX
Prices (average cents per pound): 3/				
Metals Week composite 4/	415.61	408.04	400.25	XX
Metals Week New York dealer	294.54	284.39	277.72	XX
London, standard grade, cash	282.00	276.00	269.00	XX
Kuala Lumpur	277.59	272.40	267.32	XX

- e/ Estimated. p/ Preliminary. r/ Revised. NA Not available. XX Not applicable.
- 1/ Data are rounded to three significant digits, except prices.
- 2/ Comprises tin recovered from alloys and and tinplate. The detinning of tinplate (coated steel) yields only a small part of the total.
- 3/ From Platt's Metals Week.
- 4/ The Metals Week composite price is a calculated formula, not a market price, that includes fixed charges, finance charges, and a risk factor. It normally is substantially higher than the other prices.

TABLE 2
METALS WEEK COMPOSITE PRICE 1/

(Cents per pound)

Period	High	Low	Average	
1995 (annual)	473.30	360.15	415.61	
1995:				
October	427.10	410.54	417.19	
November	427.16	419.31	425.35	
December	427.10	416.42	419.75	
1996:				
January	423.56	415.24	418.59	
February	417.70	411.89	415.55	
March	427.03	405.03	414.71	
April	435.05	422.96	429.61	
May	436.25	415.30	426.88	
June	418.01	410.83	413.65	
July	423.04	408.27	417.03	
August	411.84	407.75	409.11	
September	413.10	402.69	408.04	
October	404.38	396.12 400.		

1/ The Metals Week composite price is a calculated formula not a market price, that includes fixed charges, finance charges, and a risk factor. It normally is substantially higher than the other prices.

Source: Platt's Metals Week.

 ${\bf TABLE~3}$ TINPLATE PRODUCTION AND SHIPMENTS IN THE UNITED STATES 1/

(Metric tons, unless otherwise noted)

	_	Tinplate (all forms)				
	Tinplate waste (waste, strips,	Tin per metric ton				
	cobbles, etc.)	Gross	Tin	of plate		
Period	(gross weight)	weight	content	(kilograms)	Shipments 2/	
1995: p/	205,000	1,660,000	9,600	5.8	2,400,000	
1996:						
January	14,200	116,000	729	6.3	179,000	
February	16,700	131,000	826	6.3	196,000	
March	16,900	144,000	813	5.6	220,000	
April	16,100	124,000	790	6.3	202,000	
May	16,200	122,000	821	6.7	208,000	
June	16,500	137,000	843	6.2	218,000	
July	15,700	141,000	857	6.1	231,000	
August	14,600	132,000	845	6.4	237,000 r/	
September	14,200	133,000	809	6.1	212,000	
October	13,000	127,000	793	6.2	213,000	

p/ Preliminary. r/ Revised.

 ${\bf TABLE~4} \\ {\bf U.S.~TIN~IMPORTS~FOR~CONSUMPTION~AND~EXPORTS~1/}$

(Metric tons)

			1996	
	_			January-
Country or product	1995	August	September	September
Imports:				
Metal (unwrought tin):				
Bolivia	6,630	543	436	4,910
Brazil	8,070	959	701	6,900
China	5,610	6	201	2,340
India	146	100	100	536
Indonesia	7,230	660	720	5,550
Malaysia	3,810	45	20	935
Russia	149			435
Other	1,510	69	178	939
Total	33,200	2,380	2,360	22,500
Other, (gross weight):				
Alloys	11,400	957	989	8,640
Bars and rods	484	57	63	515
Foil, tubes, and pipes	16			(2/)
Plates, sheets, and strip	468	1	1	631
Powders and flakes	37			
Waste and scrap	15,900	628	511	6,250
Miscellaneous	1,470	107	137	897
Total	29,800	1,750	1,700	16,900
Exports (metal)	2,790	458	340	3,380

^{1/} Data are rounded to three significant digits; may not add to totals shown.

Source: Bureau of the Census.

^{1/} Data are rounded to three significant digits.

^{2/} Shipments data from American Iron and Steel Institute monthly publication AIS10.

^{2/} Less than 1/2 unit.

${\bf TABLE~5}$ CONSUMPTION OF TIN IN THE UNITED STATES, BY FINISHED PRODUCT 1/

(Metric tons of contained tin)

		1996						
								January-
	_		September			October		October
Product	1995 p/	Primary	Secondary	Total	Primary	Secondary	Total	total
Alloys (miscellaneous) 2/	W	W	W	W	32	W	32	32
Babbitt	254	21	W	21	21	W	21	201
Bar tin and anodes	77	9		9	9		9	70
Bronze and brass	1,940	46	93	139	77	90	167	1,550
Chemicals	W	W		W	280		280	280
Collapsible tubes and foil	W	W		W	W		W	W
Solder	9,470	506	236	742	517	236	753	7,440
Tinning	689	135		135	141		141	1,370
Tinplate 3/	9,610	809	W	809	793	W	793	8,130
Tin powder	159	W		W	W		W	291
White metal 4/	W	W		W	W		W	8
Other	6,680	414 r/	18	432 r/	99	24	123	5,440
Total reported	28,900	1,940	347	2,290	1,970	350	2,320	24,800
Estimated undistributed								
consumption 5/	15,900	900	500	1,400	900	500	1,400	14,000
Total	44,800	2,840	847	3,690	2,870	850	3,720	38,800

- p/ Preliminary. r/ Revised. W Withheld to avoid disclosing company proprietary data; included with "Other."
- $1/\,\mbox{Data}$ are rounded to three significant digits; may not add to totals shown.
- 2/ Includes terne metal.
- 3/ Includes secondary pig tin and tin acquired in chemicals.
- 4/ Includes pewter, britannia metal, and jewelers' metal.
- 5/ Estimated consumption of plants reporting on an annual basis.

TABLE 6
DEFENSE LOGISTICS AGENCY
TIN STOCKPILE DISPOSALS 1/

(Metric tons)

	Monthly
Period	disposals
1995:	
October	110
November	20
December	15
Year total	955
1996:	
January	90
February	450
March	534
April	5
May	10
June	330
July	1,180
August	1,370
September	2,300
October	
Total	6,260

^{1/} Data are rounded to three significant digits; may not add to totals shown.

Source: Defense Logistics Agency.

^{2/} These disposals represent only the daily, spot sales program. They do not include the long-term dealer contract sales program.